

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A data service system, comprising:
 - a server system that includes a request processor that schedules requests from external clients for transactions to be serviced by the server system based on (1) classification contained in a classification tag of those requests having such a tag and (2) a default classification mechanism for those requests not having an associated classification tag; and
 - an application system coupled to the server system, further including
 - an application engine that performs a requested transaction scheduled by the server system and provides an associated transaction response to the server system for return to the requesting external client,
 - a business rule engine that stores business rules regarding classification of various transactions, and uses the business rules to analyze at least some of the transaction responses; and
 - a tag generator that generates a classification tag for a particular transaction in a session based on the analysis of its associated transaction response by the business rule engine,
 - wherein the classification tag generated by the tag generator is attached to its respective transaction response before it is returned to the requesting external client to be subsequently attached by that client to any succeeding requests

in that session, and wherein the classification tag is generated in the application system to assign a classification per transaction based on a priority-based back-end classification.

2. (Original) The data service system of claim 1, wherein the tag generator causes the business rule engine to analyze the response with the business rules stored in the business rule engine to determine classification of the transaction such that subsequent requests that are part of the same transaction do not need to be classified again.

3. (Previously Presented) The data service system of claim 2, wherein the tag generator causes the business rule engine to selectively re-apply the business rules to responses to the subsequent requests to determine if reclassification is needed for the subsequent requests.

4. (Original) The data service system of claim 3, wherein the tag is updated if the tag generator determines that reclassification is needed.

5. (Original) The data service system of claim 1, wherein the server system attached the tag into the response by placing the tag (1) in a cookie, (2) in the body of the response message, or (3) in a URL of the response.

6. (Previously Presented) The data service system of claim 1, wherein when the server system receives a request, it parses the request to determine if the request is for an existing transaction or for a new transaction.

7. (Original) The data service system of claim 1, wherein the server system is a TCP/IP-based server application system.

8. (Original) The data service system of claim 7, wherein the server system is one of a web server system, an e-mail server system, a news server system, an e-commerce server system, a proxy server system, a domain name server system, and a local service server system.

9. (Currently Amended) In a data service system having an application system coupled to a server system, a method of classifying access requests, comprising:

storing business rules regarding classification of responses to various externally requested transactions in a business rule engine;

receiving an access request in the application system from the server system, wherein the access request is requesting the application system to perform an externally requested transaction and to generate a response for the request;

using the business rules to analyze the response to obtain the classification information of the transaction response;

generating a tag containing the classification information;

sending the tag to a requesting client that issued the request such that the tag is attached to subsequent external requests to the data service system for the same transaction; and

scheduling requests to be serviced by the server system based at least in part on the classification information contained in the tag of each of the subsequent external requests, wherein the classification information is generated in the application system to assign a classification per transaction based on a priority-based back-end classification.

10. (Previously Presented) The method of claim 9, wherein the step of scheduling requests further includes

parsing each of the requests to determine if the request is for an existing transaction or for a new transaction; and

if the request is for a new transaction, assigning a default tag to the request.

11. (Original) The method of claim 9, further comprising the step of re-applying the business rules to the responses of subsequent requests of an existing transaction to determine if reclassification is needed for the subsequent requests.

12. (Original) The method of claim 11, further comprising the step of updating the tag with new classification information if reclassification is needed.

13. (Original) The method of claim 9, wherein the step of sending the tag to a requesting client further comprises the step of attaching the tag into the response by placing the tag (1) in a cookie, (2) in the body of the response message, or (3) in a URL of the response.

14. (Currently Amended) A data service system, comprising:
a server system configured for receiving and handling requests from clients external to the data service system and including
a request processor configured for
establishing a classification of each of the requests that is classified,
scheduling the requests according to their respective classification,
assigning a default classification to requests that are not classified, and
a server module configured for servicing the requests as scheduled;
an application system having
an application engine configured for
performing requested transactions in response to the scheduled requests, and
providing responses to the scheduled requests about the requested transactions,
a business rule engine configured for

storing business rules pertaining to transaction classifications,
analyzing responses based on the business rules,
a tag generator configured for generating, and regenerating,
transaction classifications that correspondingly attach to the responses before they
are returned to the clients, each transaction classification being associated with a
particular session and being used with any subsequent requests within that session;
and

a database configured to serve as a repository for the data service
system and for interacting with the application system in relation to the requested
transactions, wherein each transaction classification is generated in the application
system to assign a classification per transaction based on a respective priority-based
back-end classification.

15. (Previously Presented) A data service system as in claim 14 in which
the application system is connected to the server system via a gateway interface or
via a plug-in application configured to operate in the same processing domain as the
server system.

16. (Previously Presented) A data service system as in claim 14 in which
the server module contains

a server engine, and

a content generator configured to receive requests from the
server engine and provide contents in response thereto, wherein the server engine

determines if the requests are to be directed to the content generator or the application system.

17. (Previously Presented) A data service system as in claim 14 in which one or more of the requests received by the server system has a tag that holds a corresponding classification, wherein the response to each classified request with a tag has that tag and the response to each unclassified request has the default classification.

18. (Previously Presented) A data service system as in claim 14 in which the application system is further configured with a cache for holding frequently accessed information.

19. (Previously Presented) A data service system as in claim 14 in which the tag generator is configured to generate and regenerate the transaction classifications based on the analysis by the business rule engine which involves categorizing the requested transactions such that they are assigned a processing priority.